WHAT IS CLAIMED IS:

1. A system for scanning both sides of a two sided specimen, comprising:

means for maintaining said specimen in a substantially fixed position;

means for damping said specimen;

means for performing a plurality of scans on predetermined portions of said specimen;

means for repositioning said specimen relative to said performing means; and

means for stitching all scans to form a relatively continuous scan of each side of said two sided specimen.

2. The system of claim 1, wherein said damping means comprise at least one damping bar positioned approximately .10 to 1.0 millimeters from said specimen.

3. The system of claim 1, wherein said repositioning means comprises means for translating said specimen and said performing means comprises an inspection arrangement wherein said inspection arrangement scans a predetermined portion of said specimen unobstructed by said damping means.

4. The system of claim 1, wherein said maintaining means comprises a three point kinematic mount, wherein all points of said three point kinematic mount are tangentially mounted, and wherein said specimen is a substantially vertically mounted semiconductor wafer.

5. The system of claim 1, wherein said stitching means comprises a computer for substantially uniformly orienting said scans and combining said scans.

6. A method for scanning a specimen, comprising the steps of:

maintaining said specimen in a substantially fixed position;

damping said specimen;

performing a first scan on a first predetermined portion of said specimen using a scanning apparatus;

repositioning said specimen relative to said scanning apparatus;

performing at least one subsequent scan on at least one subsequent predetermined portion of said specimen; and

stitching all scans to form a relatively continuous scan of said specimen.

7. The method of claim 6, wherein damping is performed by positioning at least one damping bar approximately .10 to 1.0 millimeters from said specimen.

8. The method of claim 7, wherein:

repositioning comprises translating said specimen; and

each performing step comprises scanning a portion of said specimen unobstructed by any damping bar.

9. The method of claim 6, wherein maintaining comprises holding said specimen using a three point kinematic mount in a substantially vertical on-edge type orientation.

10. The method of claim 6, wherein stitching comprises substantially uniformly orienting said scans and combining said scans.

11. A system for scanning a specimen, comprising:

a positioning arrangement to fixedly maintain said specimen in a predetermined position;

scanning optics to direct light energy to a surface of said specimen;

a repositioning element for relatively repositioning said positioning arrangement with said scanning optics;

at least one damping element proximately located to said specimen; and

a stitching device to stitch scans obtained from said scanning optics.

12. The system of claim 11, wherein each damping element comprises at least one damping bar positioned approximately .10 to 1.0 millimeters from said specimen.

13. The system of claim 11, wherein said repositioning element comprises translating means for translating said specimen and said scanning optics scan a predetermined portion of said specimen unobstructed by said damping element.

14. The system of claim 11, wherein said maintaining means comprises a three point kinematic mount, wherein all points of said three point kinematic mount are tangentially mounted, and wherein said specimen is a substantially vertically mounted semiconductor wafer.

15. The system of claim 11, wherein said stitching device comprises a computer for substantially uniformly matching the orientation of said scans and combining said scans.

16. A method for scanning a specimen, comprising:
positioning said specimen in a relatively fixed position;
damping said specimen;
scanning a plurality of portions of said specimen; and
stitching said portions together.

17. The method of claim 16, wherein damping is performed by positioning at least one damping bar approximately .10 to 1.0 millimeters from said specimen.

18. The method of claim 17, wherein performing comprises scanning a portion of said specimen unobstructed by any damping bar.

19. The method of claim 16, wherein maintaining comprises holding said specimen using a three point kinematic mount in a substantially vertical on-edge type orientation.

20. The method of claim 16, wherein stitching comprises substantially uniformly orienting said scans and combining said scans.